Package 'labelVector'

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Title Label Attributes for Atomic Vectors

Version 0.1.2

Description Labels are a common construct in statistical software providing a
human readable description of a variable. While variable names are succinct,
quick to type, and follow a language's naming conventions, labels may
be more illustrative and may use plain text and spaces. R does not provide
native support for labels. Some packages, however, have made this feature
available. Most notably, the 'Hmisc' package provides labelling methods
for a number of different object. Due to design decisions, these methods
are not all exported, and so are unavailable for use in package development.
The 'labelVector' package supports labels for atomic vectors in a light-weight
design that is suitable for use in other packages.

Depends R (>= 2.0.0)

Suggests Hmisc, knitr, testthat

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RoxygenNote 7.1.2

VignetteBuilder knitr

NeedsCompilation no

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R topics documented:

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extract_labelled   *Extract or Replace Parts of Labelled Vectors*

Description

Extraction and replacement methods for labelled vectors.

Usage

```
## S3 method for class 'labelled'
x[i, ...]

## S3 replacement method for class 'labelled'
x[i, ...] <- value
```

Arguments

x	An atomic vector inheriting the `labelled` class.
i	The elements to extract.
...	Arguments to pass to other methods.
value	typically a vector of similar class of length i

See Also

[Extract]

Examples

```
x <- set_label(1:10, "Integers")
x[1:3]

x[3] <- pi
x
```

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get_label   *Extract Label Attribute From a Labelled Vector*

Description

Retrieve the label attribute of a labelled vector. If the vector has no label, the vector name is returned
as a string.

Usage

```
get_label(x, ...)

## Default S3 method:
get_label(x, ...)

## S3 method for class 'data.frame'
get_label(x, vars = NULL, ..., return_vector = TRUE)
```

Arguments

x	An atomic vector.
...	Arguments to pass to other methods.
vars	A character vector of variable names in x for which to retrieve labels. If NULL, all labels are returned.
return_vector	logical. When TRUE, a vector of the variables is returned. Otherwise, a named list mapping variable names to labels is returned. The named list can be useful for restoring labels after various transformations that may drop attributes.

See Also

[set_label](#)

Examples

```
x <- 1:10
x <- set_label(x, "Integers")

get_label(x)

y <- letters
attr(y, "label")      # NULL
get_label(y)          # "y"

# Set labels for variables in a data frame

mtcars2 <-
  set_label(mtcars,
            am = "Automatic / Manual",
            mpg = "Miles per Gallon",
            gear = "Number of gears")

get_label(mtcars2)
```

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is_labelled *Evaluate if a vector is labelled*

Description

Functions to determine if a vector has a label.

Usage

```
is.labelled(x)

is_labelled(x)
```

Arguments

x   An atomic vector

Value

Returns a `logical(1)`.

Functional Requirements

1. Return a logical value of length 1.
2. Cast an error if x is not atomic.

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print.labelled *Print Method for Labelled Vectors*

Description

Labelled vectors are printed with their label appearing above the content of the vector.

Usage

```
## S3 method for class 'labelled'
print(x, ...)
```

Arguments

x   A vector inheriting class `labelled`

...   Additional arguments to pass to other methods.

set_label — *Set the label of an atomic vector*

Description

Variable labels are a common construct in statistical software, giving users the ability to provide plain text descriptions for variables. These descriptions can be more informative of the variable's purpose, since they need not be restricted to the naming conventions imposed on variable names.

Usage

```
set_label(x, ...)

## Default S3 method:
set_label(x, label, ...)

## S3 method for class 'data.frame'
set_label(x, ..., .dots = list())
```

Arguments

x	An atomic vector
...	For the default method, arguments to pass to other methods. For the data.frame method, key-pairs of the pattern variable = 'label'.
label	character(1), A character string denoting the label to assign to the variable.
.dots,	for data frames, a named list of key-pairs mapping the variable name to the label.

Source

Frank E Harrell Jr, with contributions from Charles Dupont and many others. (2017). Hmisc: Harrell Miscellaneous. R package version 4.0-3. https://CRAN.R-project.org/package=Hmisc

See Also

[get_label](#)

Examples

```
x <- 1:10
x <- set_label(x, "Integers")
x

# Set labels for variables in a data frame

mtcars2 <-
  set_label(mtcars,
            am = "Automatic / Manual",
```

```
             mpg = "Miles per Gallon",
             gear = "Number of gears")

get_label(mtcars2)
```

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